Idaho Virtual University Consortium
Phase 1 — Current Status Report

Appendices

Prepared for: Presidents and Chief Academic Officers
Idaho State Board of Education
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PRESIDENTS COUNCIL (DEC. 7, 1999)

A. Activities since last Meeting

The following activities have been completed since the Nov. 2, 199 Presidents Council meeting. This Dec. 7 meeting provides a Presidential Opportunity to review and comment upon recommended approaches and tools. Working Groups are also meeting on Dec. 7-8 for an overview discussion and assignments to be completed between now and the Christmas break.

- Completed preliminary Website design considerations
- Receiving material from campuses and Blake Beck for Spring 2000 courses and Fall 1999 enrollment data
- Designing the analysis structure of current activities
- Outlining the project assumptions and final report format and contents

B. Assumptions & Context for Recommendations

- Competitive in the distance education environment
- Leveraged statewide investments in the infrastructures that support education and learning
- State interests as a competitive and leveraging "edge" in distance education delivery
- Customization for Idaho current and potential student/learner groups (i.e., the user-framed, value-added approach)
- Enhanced learning by improving the learning experience of both traditional and off-campus students through greater use of remote, network-based, and other mediated resources to supplement traditional teaching methods and materials
- Economics of distance education where cost and value-added come together
- Shared consortia investments and/or separate campus investments

C. Recommended Analyses

- Comparative analysis framework for campus issues
- Current class analysis framework across 7 campuses
- Technology infrastructure comparisons across 7 campuses
- Infrastructure-based cost modeling
- Direct costs modeling
- Distance education strategic planning analysis
- Web prototype scenario — from the users' perspective

D. Types of Decisions This Work will support

- What this consortium is and what it will do
- What will be done consortially and what will be done locally
- User-Framed, Value-Added scenarios
- Where are joint investments in consortia infrastructure important
- How do you want the IVU Consortium to be distinctive in terms of resources invested, value added, and revenue received
- Priorities for further, relevant actions

- Readiness of each institution to move ahead
- Cooperative steps with other State-supported relevant activities

E. Materials Development for Report

- Comparative Analysis basic profile of each institution's distance education activities
- Comparative Analysis comparison across institutions
- Current courses/programs, etc. analysis
- Technology infrastructure comparisons and analysis
- Readiness of institutions to support alternative consortium website designs
- From the users' perspective — e.g., K-20 and Economic Development scenarios
- Cost and value-adding analysis — e.g., three scenarios to demonstrate cost modeling and the economics of distance education delivery

F. Dec. 7 Presidential Approval Sought For:

- Assumptions
- Recommendations
- Analyses components

G. Stage Setting

The purpose of this project and its report is to set the stage for presidential decision-making and implementation planning regarding future investments in distance education. The development of distance education and distance learning has been underway in Idaho for a number of years. Most recently, the Presidents comprising the Presidents Council of the Idaho State Board of Education are focusing on creating a more unified approach to presenting and providing access to their institutions' distance education opportunities.

PRESIDENTS COUNCIL (DEC. 7, 1999) BACKGROUND MATERIAL

At the October 5, 1999 Presidents Council, the Presidents requested that the Chief academic Officer, Dr. Dodson, and the Chief Technology Officer, Nancy Szofran, report on various options for Distance learning in Idaho, including some costs as well as areas where we need their leadership to solve certain challenges, e.g., fees. This material is part of the work responding to the Presidents' request

Framing Phase One Project

1. Website front end
2. Organize and analyze current activities supporting decision-making and implementation development

Steps Included

- Class Analysis
- University Issues Analysis
- Value-Added Analysis and Sample Cost/Value Scenarios Development
- Existing Technological Variety Analysis

Project Discussions to Include

1. Provosts (taking the lead)
2. Working groups with representatives from each campus
3. Interactions with other state developers — e.g., Idanet
4. Interactions with representatives of state interests — e.g., K-20 and Economic Development

Recommendations for Setting the Context & Framing the Analysis

1) Comparative Analysis Framework[1]
2) Current Course Analysis across the seven campuses (NLI)
3) User-framed, Value-Added Model Scenarios (NLI)
4) Technology Infrastructure Comparisons across seven campuses (NLI & Szofran)
5) Infrastructure-Based Cost Modeling (NLI)
6) Direct Costs Modeling[2]
7) Distance Education Strategic Planning Analysis (NLI)
8) Web Prototype Scenario — From the Users Perspective (NLI)

Analyses Components Outlined

Comparative Analysis Framework

Basic Profile

- Years in online business
- Growth over past five years (students, staff, revenue)
- Current geographic markets
- Profitability

Learning Model

1. *Accreditation* (details and quality control)
2. *Courses and programs* (disciplines, courses, programs offered, credit, non-credit)

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[1] *Online Post-Secondary Education: a Competitive Analysis* by Christine Massey and Joanne Curry Telelearning Network Inc. Report prepared for Industry Canada, March 31, 1999.

[2] *Improving Learning and Reducing Costs: Redesigning Large-Enrollment Courses* by Carol A. Twigg. Center for Academic Transformation at RPI. © The Pew Learning and Technology Program, 1999. Available at http://www.center.rpi.edu

3. *Students* (demographic data, student markets, student satisfaction)
4. *Pedagogical model* (self-paced & collaborative balance, integration of discussion groups into coursework, class size)

Business Model

- *Course production* (centralized, outside suppliers, costs per course, size of production team, research and development)
- *Course delivery* (technology platform, extent of use of multimedia, student technology requirements)
- *Faculty* (instructor profiles, use of tutors/mentors & ratios, training, instructor support services, incentives and rewards, library, bookstore)
- *Learner support* (student services including registration, advising, etc.; technical support, assessment, financial aid, library, bookstore)
- *Marketing* (pricing of courses, budget and channels used, key marketing messages)
- *Expansion strategy* (use of strategic alliances, geographic ambitions, source of capital, noncredit/continuing education versus disciplinary areas)

Current Courses Analysis (Fall 1999 and Spring 2000)

- *Classes* (by discipline, program, delivery method, topical focus, receiving site)
- *Enrollment in classes* (for each campus, by program across all campuses, by delivery method across all campuses, by receiving site, etc.
- *Fees for classes* (by program across all campuses, by delivery method across all campuses, by receiving site, etc.)

User-Framed, Value Added Model (utility from the users' perspective)

1. Ease of use
2. Relevance
3. Quality
4. Adaptability
5. Time savings
6. Cost savings

Technology Infrastructure Comparisons & Analysis

- Connectivity, networking, bandwidth
- Administrative support hardware, software, connectivity, etc.
- Services support hardware, software, connectivity, etc.
- On- and off-campus course delivery support, hardware, software, connectivity, etc.
- Authentication, security, etc.
- Support capabilities for staff, faculty, students use, and application of relevant technologies

Infrastructure-Based Cost Modeling (for unit costs)

- Technology
- Staffing
- Content or collections
- Physical plant
- Other operating expenditures
- Relevant overhead
- Administration

Direct Cost Modeling (academic productivity and unit cost per student)

Course Preparation

- Curriculum development
- Materials acquisition
- Materials development
- Faculty/TA development and training

Course Delivery

- Instruction
- Evaluation

Support Staff

Distance Education Strategic Planning Analysis

- Analyze current investment in infrastructures in terms of strategic readiness to support distance education
- Compare and contrast to relevant external and internal forces
- Pacing and timing
- Diffusion and innovation state
- Past, present, and future technologies
- Opportunity costs

Web Prototype Scenario

See accompanying scenario designed to elicit further consideration and discussion of ways in which the Consortium's website can be effective as an information system current or potential students.

DISTANCE EDUCATION AT POSTSECONDARY EDUCATION INSTITUTIONS: 1997-98

In their conclusions, the authors state the following:

> "This report presents findings for the 12-month 1997-98 academic year about the status of distance education in all postsecondary education institutions. In the most general terms, it finds that distance education appears to have become a common feature of many postsecondary education institutions and that, by their own accounts, it will become more common in the future.
>
> "More specifically, this study found that about one-third of the 2-year and 4-year postsecondary education institutions offered any courses through distance education during 1997-98, and that 25 percent of those that offered any courses through distance education also offered degree or certificate programs that could be completed entirely through distance education. Public institutions were also found to be more like to offer distance education courses than private institutions. While institutions employed a wide variety of technologies to deliver distance education, more institutions were likely to employ several types of video and the Internet-based technologies than any other modes of delivery included in the survey.
>
> "There were an estimated 1,661,100 enrollments in distance education courses during 1997-98. The vast majority of these enrollments were in college-level, credit-granting courses, mostly at the undergraduate level. Institutions offered an estimated 54,470 different distance education courses in 1997-98. The largest number of courses was in English, humanities, and the social and behavioral sciences, and in business and management. The majority of postsecondary institutions charged students the same tuition and fees for distance education courses as they did for traditional on-campus courses.
>
> "Trend analyses reveal that the percentage of higher education institutions (a subset of all postsecondary institutions) offering courses through distance education grew by one-third from 1995 to 1997-98. The percentage of institutions offering such degree and certificate programs remained constant between 1995 and 1997-98. Between 1994-95 and 1997-98, the number of distance education enrollments and course offerings and the number of distance education degree and certificate programs approximately doubled. This suggests that the greatest growth in offerings through distance education at higher education institutions occurred not so much in terms of the percentage of institutions offering distance education, but rather in terms of the number of distance education course offerings and enrollments of those institutions that have been offering distance education since 1995.

"While these findings will help to inform stakeholders — including individuals considering a postsecondary education, faculty and administrators at postsecondary institutions, providers of technologies used for distance education, and policymakers at federal, state, and local levels — they do not address many of the pertinent questions about distance education. As described in the introductory chapter, these questions include issues related to:

- Equity of access to postsecondary education
- The costs of developing and implementing distance education programs
- Accreditation of and quality assurance in distance education programs
- Copyright and intellectual property rights
- Changes in the role of postsecondary faculty and challenges facing them as a result
- Pressures on existing organizational structures and arrangements" (p. 55)

Student-Centered User-Framed Value-Added Model

SAMPLE DISCUSSION INTERVIEW IN AREA OF ECONOMIC DEVELOPMENT

This is an example of a student-centered discussion that focuses on economic development or growth. See below for an introduction to the underlying methodology.

♦ What are the problems you or your constituents are facing?

Economic development in rural areas. Lack of opportunity in rural areas. Lots of pockets of need for job creation. Hear a lot about rural. Second, help companies grow and expand. *Interviewer question on importance of skilled workforce.* Yes, that's very true in idaho. Most critical is well qualified, trained, workforce. So supportive of universities. Supplemented by workforce training. Lot of course training in the industry itself. Use universities for additional academic students. Support of small business development centers. Help with business plans. Have manufacturing extension, much like agriculture extension. To help small, fast-growing manufacturing companies. Through programs like commerce workforce development funds. Possibility of tracking through universities (vocational schools), some internal training.

Idaho major federal lab clusters. Network of business incubators. Small business development center has a geographic network. Very diverse state.

Four most important issues:

1) telecommunications
2) isp's
3) basic infrastructure (water, sewers, streets, etc.)
4) community diversification (old timber)

♦ **Where do you or your constituents go for educational opportunities?**

Still pretty traditional – to local universities and colleges. Used to find people would go to universities to get answers to questions. Folks also finding other sources of answers. Highest concentrations of engineers, etc. in the Idaho engineering lab. So a lot of people go to research facilities like that. Industry, internally, find a network. Now people can go to universities and organizations outside the state. Thinks the trends are there. Might be in the fast changing technology world. For general education, might go elsewhere. Has worked with various schools and universities on outreach. Still suffering from the academic structure. Needs more virtual and practical. Have to be more flexible and quicker to respond.

♦ Where would you or your constituents like to be five years from now?

Want to have rural lifestyle, but want to be connected technology-wise. Have access to highspeed information, educational training. Some industries are moving toward employees working at home. Highspeed networking the key. A lot of small communities have been by-passed by interstate. Now need fiber optics off-ramps, with trained support. Strengthen the core relationship to universities and colleges. (along lines above).

INTRODUCTION

User-framed value-added—being student-centered

The user-framed value-added model is a powerful tool for understanding and designing student-centered programs, services, and support systems. For example,

1) By focusing on problem solving, we begin a dialog about what matters most to individuals and communities.
2) By focusing on information seeking and use, we begin a dialog about learning and knowing.
3) In beginning a dialog about thinking, learning, and education, we begin to create relationships that—if nurtured—can strengthen sustainability on both sides of the "handshake."
4) As we incorporate user-framed value-added to our organizational and financial models, we add new meaning to our considerations of efficiency and effectiveness.

A powerful complement

This is a powerful complement to other paths for understanding the dimensions of being student-centered. We will compare the UFVA Model to a general organizational model—within the context of possible approaches to developing and delivering content as well as considering the learning model possibilities.

BEING STUDENT-CENTERED—ADDING THE USER-FRAMED VALUE-ADDED DIMENSION

In the following table, we lay out a brief comparison of two models—an organizational model and the UFVA model. As we just noted, the UFVA Model provides a strong complement to a regular organizational model.

User-framed value-added—simple to use, sophisticated in results

There are a lot of benefits of the user-framed value-added approach; not the least of which is that it is simple to use. You set up an hour or an hour-and-a-half to have a discussion with an individual or a group about whom you want to know more. In fact, these interviews and accompanying analyses are vitally important. You will learn things about every aspect of your university or college—from the perspective of your current or potential students/learners.

1) You guide the discussion with a set of simple questions that focus on problem solving, information seeking and use behaviors, etc.

2) You interview enough people to be sure you met your "who do I want to talk to" goals. This is one of those instances where more can actually "be more" because you are building a network of relationships in addition to understanding how to add value from the student/learner perspective.

3) You analyze the discussion notes looking for patterns. We have found that you end up with a handful of patterns that you can view as "major user groups." The patterns of each major user group have implications for the infrastructure investments you make and the value you add as you create customized content design, content delivery, and learning models.

Let's look at the table that compares a general organizational model with the user-framed value-added model.

Organizational Model **UFVA Model**

Business	**Measure**	**Measure**	**Educator**
Market study, etc. Outcome: Marketing plan			Interview discussions ♦ Problem-solving ♦ Info seeking ♦ Info use ♦ Tech adoption ♦ Infrastructures Outcome: Major user patterns
Build capacity	Organizational effectiveness Performance measures	Organizational effectiveness Performance measures Framed by value-adding goals	Build capacity
♦ **Business/client relationship** ♦ **Product development** ♦ **Product delivery** ♦ **One size generally fits all**	How do I add value to you from my perspective of utility?	How do I add value to you from your perspective of utility?	♦ **Educator/Student Relationship** ♦ **Content development** ♦ **Content delivery** ♦ **Learning model** ♦ **Customized to major user patterns**
Buyer ♦ Attitudes ♦ Life style ♦ Price points	♦ Benefits ♦ Outcome measures ♦ Profits	♦ Benefits ♦ Outcome measures ♦ Organized by value adding goals ♦ Financial sustainability	Student/Learner ♦ **Problems solved** ♦ **Utility of design & delivery** ♦ **Customization & sustainability**

Basically, the UFVA Model adds a foundation for focusing organizational effectiveness considerations (from the users' perspective of utility) as well as framing a deeper understanding of benefits and outcomes (from the perspective of the users' ability to solve problems through education's learning experiences). What do we mean by "adding value?"

Adding value in information and educational systems

Value-Adding Processes are *any* processes that faculty and staff members undertake in their creation and support of an activity such as distance education. Again, it is important to note that the value added is considered from the perspective of the distance education program users.

Once the interview discussions are completed, the value-adding analysis focuses on identifying Major User Groups, the patterns they share, and the models of programming and service tailored to the Major User Groups' (students/learners) educational environment. There are three questions to consider when identifying value-adding processes:

- Which are the processes and value-adding categories that would be entirely new to the distance education program?
- Which are the processes and value-adding categories that faculty and staff members already engages in but a new level of activity would be required?
- Are there any processes and value-adding categories that would no longer be required (as you can determine at this point following the analysis of student/learner interviews)?

Value-Adding Processes

Projects invested in this Methodology are part and parcel of six value-adding categories:

- Ease of Use
- System Relevance
- Quality
- Adaptability
- Time Savings
- Cost Savings

Ease of Use:

Anything in the physical, human, or software that tends to reduce the difficulty in using the distance learning program and its tools.

Making the Information System and its Parts Relevant:

Selecting and filtering to focus on the needed and remove the extraneous including excluding what you consciously leave out, including what you specifically bring in.

Quality

This is the equivalent of excellence and truthfulness in labeling—which can include accuracy, comprehensiveness, currency, reliability, and validity.

Adaptability

Investments made in the information system that will strengthen its responsiveness.

Time Savings

Processes that reduce the time and effort a student/learner needs to make choices and get educational programs and services

Cost Savings

Any conscious information system design and operating decisions that save dollars for the student/learner. This includes opportunity costs and the idea that time is money. Cost Savings does not necessarily mean, "the university pays." It may mean offering users options, including the option to pay for premium services that save time.